Centers for Learning and Teaching (CLT)

Goals:

- **Significantly increase numbers of K-12 educators in formal/informal settings who can implement standards-based instruction.**
- **Rebuild and diversify national infrastructure for K-12 SMT education.**
- **Provide opportunities for research into learning, instruction, educational policies, and outcomes of standards-based reform.**

CLT NEW AWARDS: FY 2002

- **CLT WITH A FOCUS ON RESEARCH FOR DEVELOPING INSTRUCTIONAL MATERIALS IN SCIENCE**

  Research on the analysis, design, development, adoption & implementation of science materials.

- **CENTER FOR PROFICIENCY IN TEACHING MATHEMATICS**

  Research on the nature of mathematical knowledge important to teachers' instructional proficiency; strengthening the pre- and in-service continuum.

- **ST. LOUIS CENTER FOR INQUIRY IN SCIENCE TEACHING & LEARNING**

  Research on continuum of science educators (entrants, in-field, out-of-field); regional model of teacher development; and effects of various types of collaboration.

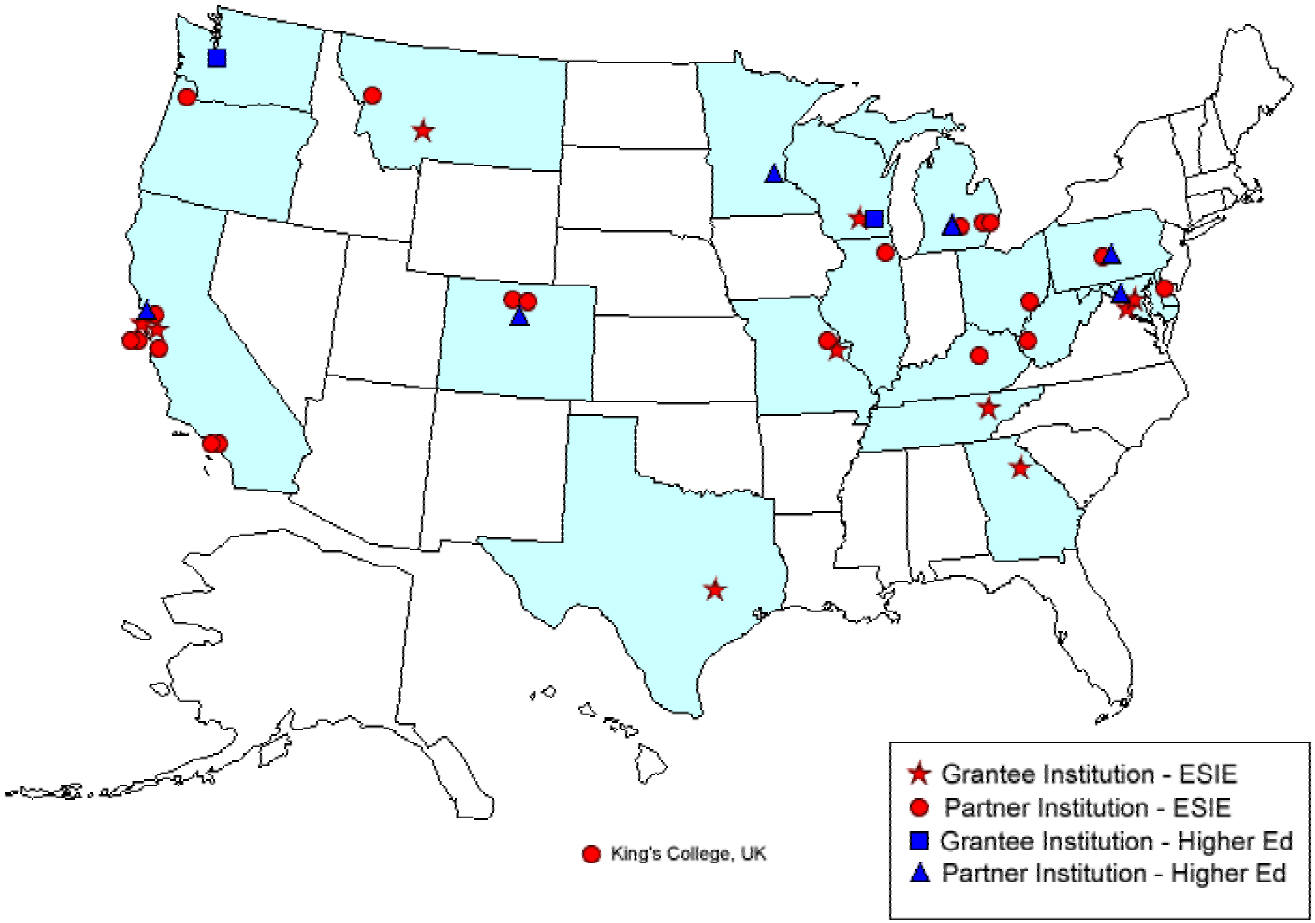
CLT NEW AWARDS: FY 2003

- **MAC:TCT**
  Mathematics in America's Cities: Children, Teachers, and Communities
  Rutgers U and others

- **CSMC**
  Center for the Study of Mathematics Curriculum
  U of Missouri Columbia and others

- **TELS**
  The Educational Accelerator: Technology-Enhanced Learning in Science
  U of California Berkeley and others

Centers for Learning and Teaching



Collaboration

How are effective collaborations established?

How does one link to other universities and educational organizations?

How is effective outreach done?

Centers for Learning and Teaching Program "At a Glance"

ITS CTL: Center for Applications of Information Technology in the Teaching and Learning of Science

Texas A&M U; Texas Educ Agency; Texas Business Educ Coalition; Texas RSI & SSI; School Districts: Dallas; Houston; San Antonio; Beeville; Hereford

MAC-MTL: Mid-Atlantic Center for Mathematics Teaching and Learning

U of Maryland; U of Delaware; Penn State U; DE St Dept of Educ; PG County Pub Schools; Pittsburgh Pub Schools

DiME: Diversity in Mathematics Education: Building Infrastructure for Learning and Teaching Mathematics with Understanding

U of Wisconsin Madison; U of California Berkeley; U of California LA; Madison Metro Sch Dist; Berkeley USD; CA Subject Matter Project

CLTWest: The Center for Learning and Teaching in the West

Montana State U; Portland State U; U of Montana; Colorado State U; U of Northern Colorado; Portland Comm College; Ft. Belknap College; Portland Pub Schools; Outreach to 68 rural and reservation schools

CILS: Center for Informal Learning and Schools

Exploratorium; U of California, Santa Cruz; Kings College London; Fort Worth Museum of Science and History; Tech Museum of San Jose; Monterey Bay Aquarium; Symour Center at Long Marine Lab; San Jose Children's Discovery Museum; COSI in Columbus, OH; London Zoological Society; San Francisco Unified School District

ACCLAIM: CLT: Appalachian Collaborative Center for Learning, Assessment and Instruction in Mathematics

U of Tennessee; Ohio U; U of Kentucky; U of Louisville; Marshall U; Rockcastle County, KY; Lincoln County, KY; Oneida, TN; Alvin York Agricultural Institute, TN; Vinton County, OH; Eastern, OH; Boone County, WV; Lincoln County, WV; Appalachian RSI

CAESL: Center for Assessment and Evaluation of Student Learning

WestEd; U of California LA; Stanford U; Lawrence Hall of Science; U of California Berkeley; Concord Consortium; Cupertino; Los Altos; Menlo Park; Mountain View; Palo Alto; Redwood City; Santa Clara; Whisman; El Centro; Fresno; Garvey; Kings Canyon; Pomona; Sacramento; San Francisco; San Diego

Center for Learning and Teaching with a Focus on Research for Developing Instructional Materials in Science

AAAS; Michigan State U; Northwestern U; U of Michigan; Chicago Public Schools; Detroit Public Schools Lansing School District

Center for Proficiency in Teaching Mathematics

U of Georgia; U of Michigan; Gwinnett County Public Schools ; Morgan County Public Schools; Social Circle City Schools in Georgia; Washtenaw Intermediate School District in Michigan

St. Louis Center for Inquiry in Science Teaching & Learning

Washington U St Louis; Missouri Botanical Garden; Saint Louis Zoo; St Louis Science Center; U of Missouri St Louis; St Louis Comm College; Kirkwood R-7 Sch Dist; Maplewood Sch Dist; Riverview Sch Dist; St Louis Pub Schools; University City Sch Dist; ASTC

Mathematics in America's Cities: Children, Teachers, and Communities

Rutgers U; City U of New York; U of Pennsylvania; Bank Street College; Lincoln U; U of Pittsburgh; Merck Institute; Education Works; NY City Pub Schools; Philadelphia Pub Schools; Newark Sch Dist; Plainfield Sch Dist

Center for the Study of Mathematics Curriculum

U of Missouri Columbia; Michigan State U; Western Michigan U; U of Chicago; Horizon Research; Novi Pub Schools; Kalamazoo Pub Schools; Battle Creek Schools; Columbia Pub Schools

The Educational Accelerator: Technology-Enhanced Learning in Science

U of California Berkeley; Concord Consortium; Arizona State U; Boston U; Mills College; Norfolk State U; North Carolina Central U; Pennsylvania State U; Technion Institute; Berkeley Pub Schools; Cambridge Pub Schools; Mount Diablo Pub Schools; Tempe Pub Schools; Maynard Pub Schools

ESIE CLTs

7-Mathematics
6-Science
2-Educational Technology
0-Engineering/Technology Educ.

6-13 Collaborators
12-40 Doctoral students, plus
postdocs, undergraduates,
teachers, graduate students,master
teachers, faculty researchers, etc.

CLT-Net

1. Build a national presence for the work of the CLTs.
2. Establish tools and an environment that supports collaboration across projects.
3. Make the research produced by the CLTs accessible.
4. User driven.

Standardized annual program monitoring Westat

Westat is responsible for developing and maintaining a web-based collection system used to obtain annual information from each project.

This data is

- used for program evaluation
- shared back with each project
- accessible by SRI, Abt Associates and program officers.

The purpose is to collect standardized data on:

…the characteristics of graduate students, post-doctorates, and faculty members participating in CLT;

…the educational and occupational status of CLT graduate students and post-doctorates who left the graduate program during the previous academic year;

…the characteristics of the K-12 teachers and other educations participating in the CLT activities; and

…the characteristics of the undergraduate/graduate courses developed, revised, or conducted with CLT support.